

CLAIMS:

1. A method of manufacturing a geometrically substantially closed ring-shaped core (1) provided with a first gap (2) which is substantially filled, which core (1) has an inner face (5) defining an inner circumference, an outer face (6) defining an outer circumference and two substantially parallel side faces (7), and is suitable for use in a magnetic coil (10),

5 which method comprises the following consecutive steps:

- providing the first gap (2) in the core (1),
- filling the first gap (2) by dispensing a curable synthetic resin, and
- curing said curable synthetic resin.

10 2. A method as claimed in claim 1, characterized in that before the provision of the first gap (2) the core (1) is put on a carrier (20) having a surface (21), such that the core (1) rests with said outer face (6) on the surface (21) of the carrier (20).

3. A method as claimed in claim 1, characterized in that

- 15 - before the provision of the first gap (2) the core (1,11) is attached to a carrier (20) having a surface (21), such that the core (1) rests with one of its side faces (7) on the surface (21) of the carrier (20), and
- the core (1) is kept with at least one attachment means (22;23) in its position on the surface (21) of the carrier (20) during the provision and the filling of the first gap (2).

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4. A method as claimed in claim 3, characterized in that substantially simultaneously with the provision of the first gap (2) a second gap (12) is provided, which second gap (12) is diametrically opposed to the first gap (2).

25 5. A method as claimed in claim 1, 2 or 3, characterized in that a filler is added to the synthetic resin before the curable synthetic resin is dispensed.

6. A ring-shaped core (1,11) which is substantially closed and provided with a first gap (2), which first gap (2) is substantially filled with a spacer material, which core

(1,11) has an inner face (5) defining an inner circumference, an outer face (6) defining an outer circumference, and two substantially parallel side faces (7), and is suitable for use in a magnetic coil (10),

- 5 characterized in that the spacer material is a synthetic resin (3) which is substantially homogeneously distributed in the first gap (2) and has a concave surface (17).

7. A core (1,11) as claimed in claim 6, characterized in that the synthetic resin comprises a filler.

- 10 8. A core (1,11) as claimed in claim 7, characterized in that the filler is a magnetic material.

9. A core (1,11) as claimed in claim 6 or 8, characterized in the core (1,11) comprises a second gap (12), and in that the first (2) and the second gap (12) enclose an angle
15 between 5 and 355° with one another.

10. A magnetic coil (10) comprising a core (1,11) as claimed in claim 6 and a number of turns (9).